



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/553,018

08/31/2006

Robert Frank Buxton

GB20020064US1

1307

45211

7590

04/30/2008

Robert A. Voigt, Jr.

WINSTEAD SECHREST & MINICK PC

PO BOX 50784

DALLAS, TX 75201

EXAMINER

BONZO, BRYCE P

ART UNIT

PAPER NUMBER

2113

MAIL DATE

DELIVERY MODE

04/30/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/553,018	Applicant(s) BUXTON ET AL.	
	Examiner Bryce P. Bonzo	Art Unit 2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-7, 11 and 12 is/are allowed.
- 6) ☒ Claim(s) 1-3, 8-10 and 13-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/10/05</u> . | 6) <input type="checkbox"/> Other: _____ |

NON-FINAL OFFICIAL ACTION

Status of the Claims

Claims 1-16 are rejected under obvious-type double patenting.

Claim 16 is rejected under 35 USC §101:Non-Statutory Subject Matter.

Claims 1-3 and 8-16 are rejected under 35 USC §102.

Claims 4-7 are objected to while containing allowable subject matter.

Obvious-type Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-23 of allowed United States Patent Application No. 10/228,636 contain every element of claims 1-16 of the instant application and as such anticipate claims 1-16 of the instant application.

Claims 1-47 of allowed United States Patent Application No. 10/256,093 contain every element of claims 1-16 of the instant application and as such anticipate claims 1-16 of the instant application.

“A later patent claim is not patentably distinct from an earlier patent claim if the later claim is obvious over, or anticipated by, the earlier claim. In re Longi, 759 F.2d at 896, 225 USPQ at 651 (affirming a holding of obviousness-type double patenting because the claims at issue were obvious over claims in four prior art patents); In re Berg, 140 F.3d at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998) (affirming a holding of obviousness-type double patenting where a patent application claim to a genus is anticipated by a patent claim to a species within that genus). “ ELI LILLY AND COMPANY v BARR LABORATORIES, INC., United States Court of Appeals for the Federal Circuit, ON PETITION FOR REHEARING EN BANC (DECIDED: May 30, 2001).

Rejections under 35 USC §101: Non-Statutory Subject Matter

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 16 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 16 explicitly recites a computer program.

Rejections under 35 USC §102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3 and 8-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Novick (United States Patent No. 7,096,382). As per the claims, Novick discloses:

1. A method for recovering a data repository from a failure affecting a primary copy of the data repository, including the steps of:

maintaining a secondary copy of data sufficient to recover the primary copy of the data repository and data items held thereon (column 6, lines 41-52);

in response to a failure affecting the primary copy of the data repository, recreating a primary copy of the data repository from the secondary copy (column 6, lines 41-52);

using a restore process to restore data items to the primary copy from the secondary copy within a recovery unit of work, wherein data items restored to the

Art Unit: 2113

primary copy of the data repository within the recovery unit of work are made inaccessible to processes other than the restore process until commit of the recovery unit of work (column 9, lines 37-59 and column 12, lines 57-63);

prior to commit of the recovery unit of work, configuring the primary copy of the data repository to enable addition of data items to the data repository independent of said restore step and to enable processes other than the restore process to retrieve said independently added data items (column 12, lines 57-63); and

in response to successful completion of the restore step, committing the recovery unit of work including releasing said inaccessibility of the restored data (column 13, lines 7-11 and 30-50).

2. The method according to claim 1, wherein maintaining the secondary data copy comprises storing a backup copy of the data repository and storing log records describing updates to the primary copy performed since the backup copy was stored; wherein recreating the primary copy of the data repository includes the step of copying data repository definitions from the backup copy and applying the definitions to recreate the primary copy; and wherein restoring data items to the primary copy comprises copying data items from the backup copy and replaying the log records to identify and reapply updates to the primary copy (column 13, lines 12-29).

3. The method according to claim 1, wherein maintaining the secondary data copy includes storing log records that describe updates to the primary copy, and wherein the step of restoring the primary copy of the repository includes the steps of:

replaying the log records of operations performed on data items within the primary copy of the data repository (column 13, lines 12-21);

caching log records relating to operations performed under syncpoint control within an original unit of work; determining from the cached log records the state of the original units of work at the time of the failure (column 13, lines 12-21); and

determining which of said syncpoint-controlled operations to perform within the recovery unit of work based on the determined state of the original units of work (column 13, lines 55 through column 14, line 18).

8. The method according to claim 1, wherein data restored to the primary copy of the repository within the recovery unit of work is made inaccessible by setting a flag for each data item restored to the data repository, the flag indicating that the data item is not accessible (column 12, lines 57 through column 13, line 50).

9. The method according to claim 8, wherein the flag indicates a transactional state of the data item and wherein a process for retrieving data items from the repository is adapted to identify one or more predefined transactional states as inaccessible (column 9, lines 37-59 and column 12, lines 57-63).

10. The method according to claim 9, wherein the flag comprises a byte value of a distinctive primary key allocated to the data item when the data item is restored to the data repository, the byte value being selected from a range of values indicative of the transactional state of the data item (column 9, lines 37-59: the priority is the order).

Claims 13 and 14 are the data communication system implementation of the methods of claims 1 and 2 in combination with 3 respectively, and are rejected on the same grounds.

Claim 15 is the computer program product implementation of the method of claim 1 and is rejected on the same grounds.

Claim 16 is the computer program per se implementing the method of claim 1 and is rejected on the same grounds.

Allowable Subject Matter

Claims 4-7, 11 and 12 are objected to while containing allowable subject matter. Applicant is reminded that claims are allowed a whole, and that any modification to the scope of the claims jeopardizes this indication of allowable subject matter. Claims 4, 5 and 11 are shown as representative of the allowable subject matter.

4. The method according to claim 3, including performing operations within the recovery unit of work in accordance *with the following procedure:*

if the original unit of work was committed before the failure, performing the relevant operations of the committed unit of work;

if the original unit of work was in-doubt when the failure occurred, performing the relevant operations of the in-doubt unit of work but marking the operations in-doubt; and

if the original unit of work is neither committed nor in-doubt, discarding the cached operations.

5. The method according to claim 3, including discarding from the recovery unit of work *any pairs of addition and deletion operations that comprise an addition of a data item to the primary copy of the data repository and a deletion of the same data item from the primary copy of the data repository, on condition that said addition and deletion operations were performed and committed before the failure.*

11. The method according to claim 10, wherein the step of setting a flag comprises:

setting a first flag for any data item for which the latest operation performed on the data item prior to the failure was a committed add operation which is to be restored to the data repository within the recovery unit of work; and

setting a second flag for any data item for which the latest operation performed on the data item prior to the failure was an in-doubt add or delete operation which is to be restored to the data repository within the recovery unit of work.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryce P. Bonzo whose telephone number is (571)272-3655. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571)272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bryce P Bonzo/
Primary Examiner,
Art Unit 2113